

WHAT IS CLAIMED IS:

1. A solid electrolyte battery comprising:
a first electrode including a first collector, and
a first active material layer formed on one surface of
said first collector with an outer peripheral edge
portion of said first collector remaining as a collector
exposed portion;

a second electrode including a second collector and
second active material layers formed on both surfaces of
said second collector; and

a solid electrolyte interposed between said first
electrode and said second electrode;

wherein said second electrode is held in said first
electrode in such a manner that said first active
material layer is opposed to each of said second active
material layers via said solid electrolyte, and is sealed
in said first electrode by joining said collector exposed
portion of said first electrode to each other.

2. A solid electrolyte battery according to claim
1, wherein said first electrode is configured as a pair
of first electrodes, and said second electrode is held
between said first electrodes.

3. A solid electrolyte battery according to claim
1, further comprising an electrode terminal connected to

said second electrode, wherein said electrode terminal is led to the outside while being held in the joined portion of said collector exposed portion of said first electrode.

4. A solid electrolyte battery according to claim 3, further comprising a sealing member having electric insulation, which is disposed between said electrode terminal and said first electrode.

5. A solid electrolyte battery according to claim 1, wherein said solid electrolyte is made to gel by using a plasticizer.

6. A solid electrolyte battery according to claim 1, wherein said battery is formed into a sheet having a thickness of 2 mm or less.

7. A solid electrolyte battery according to claim 1, further comprising a separator disposed between said first electrode and said second electrode.

8. A solid electrolyte battery according to claim 1, wherein said first electrode is a negative electrode, and said second electrode is a positive electrode.

9. A solid electrolyte battery according to claim 8, wherein said negative electrode contains lithium, a lithium alloy, or a material into or from which lithium can be doped or released.

10. A solid electrolyte battery according to claim

8, wherein said positive electrode contains a composite oxide of lithium and a transition metal.

11. A solid electrolyte battery according to claim 1, wherein said first electrode is a positive electrode, and said second electrode is a negative electrode.

12. A solid electrolyte battery according to claim 11, wherein said negative electrode contains lithium, a lithium alloy, or a material into or from which lithium can be doped or released.

13. A solid electrolyte battery according to claim 11, wherein said positive electrode contains a composite oxide of lithium and a transition metal.

14. A method of producing a solid electrolyte battery, comprising the steps of:

forming a first active material layer on one surface of a first collector with an outer peripheral edge portion of the first collector remaining as a collector exposed portion, to produce a first electrode;

forming second active material layers on both surfaces of a second collector, to produce a second electrode;

holding the second electrode in the first electrode in such a manner that the first active material layer is opposed to each of the second active material layers via

a solid electrolyte; and

joining the collector exposed portion of the first electrode, in which the second electrode has been held in said holding step, to each other, to seal the second electrode in the first electrode.

15. A method of producing a solid electrolyte battery according to claim 14, wherein in said sealing step, the collector exposed portion of said first electrode is joined to each other by either of electron beam welding, laser welding, ultrasonic welding, resistance welding, and pressure welding.

16. A method of producing a solid electrolyte battery according to claim 14, wherein the first electrode produced in said first electrode producing step is configured as a pair of first electrodes, and in said holding step, the second electrode is held between the pair of first electrodes.

17. A method of producing a solid electrolyte battery according to claim 14, wherein in said holding step, an electrode terminal is connected to the second electrode, and the electrode terminal is led to the outside while being held in the joined portion of the collector exposed portion of the first electrode.

18. A method of producing a solid electrolyte

battery according to claim 17, wherein in said sealing step, a sealing member having electric insulation is disposed between the electrode terminal and the first electrode, and a portion, at which the sealing member is disposed, of the collector exposed portion of the first electrode is joined to each other by heat seal via the sealing member.

19. A method of producing a solid electrolyte battery according to claim 14, wherein the solid electrolyte is made to gel by using a plasticizer.

20. A method of producing a solid electrolyte battery according to claim 14, wherein the battery is formed into a sheet having a thickness of 2 mm or less.

21. A method of producing a solid electrolyte battery according to claim 14, further comprising the step of disposing a separator between the first electrode and the second electrode.

22. A method of producing a solid electrolyte battery according to claim 14, wherein the first electrode is a negative electrode, and the second electrode is a positive electrode.

23. A method of producing a solid electrolyte battery according to claim 22, wherein the negative electrode contains lithium, a lithium alloy, or a

material into or from which lithium can be doped or released.

24. A method of producing a solid electrolyte battery according to claim 22, wherein the positive electrode contains a composite oxide of lithium and a transition metal.

25. A method of producing a solid electrolyte battery according to claim 14, wherein the first electrode is a positive electrode, and the second electrode is a negative electrode.

26. A method of producing a solid electrolyte battery according to claim 25, wherein the negative electrode contains lithium, a lithium alloy, or a material into or from which lithium can be doped or released.

27. A method of producing a solid electrolyte battery according to claim 25, wherein the positive electrode contains a composite oxide of lithium and a transition metal.